Public Works Monthly Report

December 2013

SPECIAL POINTS OF INTEREST:

- Snow at EUG
- Outfall Study
- Skatepark Update
- Therese Walch on United Way
- Adopt a Family

INSIDE THIS ISSUE:

Parks and Open Space

CROSS TRAINING HELPS FILL A NICHE IN RECENT WINTER STORM

Incident Command Team for shifts 10 and 12

Public Works opened its emergency command center (ECC) early on Friday morning, December 6, and operated round-the-clock until 6:00 a.m. on Friday, December 13. An ice-snow emergency was declared several hours after opening the ECC on December 6. Using priority route maps and constant field reports, staff used a combination of plowing, sanding and deicing to clear roadways or provide traction when packed snow and ice became too hard to plow effectively. Crews also cleared snow and ice from a number of downtown access ramps, sidewalks, pedestrian bridges and bikeways. Over the course of the seven-day emergency response, crews applied 957 cubic yards of gravel and 6,583 gallons of magnesium chloride deicer. Response crews logged nearly 4,000 hours. During the storm event, various Natural Resources staff assisted in the Public Works response, including serving as ICS Command Staff, working to clear ice from catch basins and sidewalks, and training to use sanders and de-icing trucks. Other Park Ops team members took on Incident Command roles serving as Incident Commander, Operations Chief, Crew Staging Section Chief and Sidewalk Ramp Cleaning Section Chief. For more on the snow event, see PWM article on page 2.

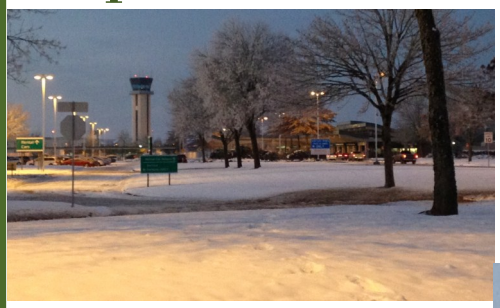
ALL FOR ONE AND ONE FOR ALL


Rivers to Ridges Partnership Executive Team members and staff meet at the Springfield Library

The Rivers to Ridges Partnership executive team held its annual meeting on December 19. Over the past three years, the partnership – comprised of 18 executive members – continues to mature and evolve and has reached unprecedented levels of success in fulfilling their vision. Through a spirit of collaboration and innovation, the partnership continues to work towards acquiring land, enhancing and restoring habitat, and providing educational and recreational opportunities consistent with the protection of the region's land and water resources. Through this process, the partnership has built a strong reputation among state and federal funding agencies that augments each member organization's ability to fulfill its own mission while also helping realize the partnership's collective vision.

Airport

Bill Daneke

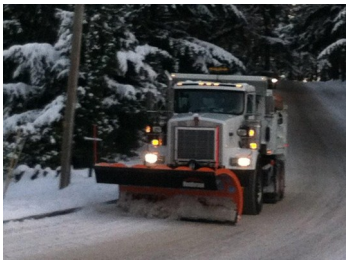


The Airport weathered December's week-long snow event fairly well, with a few flight delays and a couple of cancellations. The prolonged freeze was a challenge for airfield and landside crews. It was an expensive snow event totally more than $51,000 in anti-ice and de-icing materials, runway sand, and fuel for the Airport's snow removal equipment. Personnel costs were increased as well with crews moving to 12-hour-on, 12-hour-off during the storm. All in all the Airport team did a great job of keeping EUG up and operating.

De-icing Aircraft

Maintenance

2013 Snow/Ice Storm



Early morning Friday, December 6 snow began to fall over the City of Eugene. Public Works opened its Emergency Command Center (ECC) to monitor the progress of the storm as well as coordinate resources to respond. It quickly became apparent that the volume of snow and the continued sub-freezing temperatures were more than had been forecast, and an ice-snow emergency was declared several hours after opening the ECC. Round-the-clock operation began at 6 a.m. and went until 6 a.m. Friday, December 13.

Using priority route maps and constant field reports, staff used a combination of plowing, sanding and deicing to clear roadways or provide traction when the packed snow and ice became too hard to plow effectively. Crews also cleared snow and ice from a number of downtown access ramps, sidewalks, pedestrian bridges and bikeways. The ECC stayed in contact with other organizations/municipalities such as Lane County Public Works, EWEB, Eugene School District, LTD and Eugene Police Department to insure quick response to all hazards and insure safe travel to the general public.

Over the course of the seven-day emergency response, crews applied 957 cubic yards of gravel and 6,583 gallons of magnesium chloride deicer. Response crews logged nearly 4,000 hours. Total costs of the effort are in the range of $125,000. Public Works budgeted about $100,000 in road and stormwater funds for emergency storm responses in FY14, and some of the $125,000 is for regular personnel costs and equipment costs the department would have incurred for other activities (such as leaf collection) had the storm not occurred, so it appears that any non-budgeted expenses can be met through some thoughtful prioritization of road and stormwater activities for the rest of the fiscal year.

After the snow had gone, efforts began on the recovery phase. City sweepers made a concerted effort to clear the sand from arterial routes within a week of the start of the recovery, and then the effort shifted to the south hills, where much of the traction sand was applied. The sweepers will be doing double duty as they also are needed to support the leaf collection program, which resumed on Monday December 17.

Wastewater

Outfall Mixing Zone Study

The Eugene-Springfield Wastewater Pollution Control Facility (WPCF) has three outfalls in the Willamette River. Oregon's Department of Environmental Quality (DEQ) requested the WPCF conduct an outfall mixing zone study to meet the current requirements of DEQ's 2012 Regulatory Mixing Zone Internal Management Directive. The results of which will be used in the National Pollutant Discharge Elimination System (NPDES) permit renewal. The NPDES permit defines the allowable regulatory mixing zone and the Zone of Immediate Dilution.

In September, field data was collected to document the characteristics of the outfall and mixing zones, the discharge water, and the ambient receiving waters, along with mapping the surrounding environment. This data was analyzed using multiple mixing zone models to assess the overall performance during critical flow conditions. To achieve some of the field observations a tracer study was performed where red dye was metered into the discharge water.

The final report was submitted to DEQ stating compliance with temperature standards including all of the thermal plume provisions of the Oregon water quality standards.

Contrail Smith

New Wastewater Tech III for Biosolids Management Facility

Contrail Smith (Trail) was promoted to Wastewater Tech III for the operation of the regional Biosolids Management Facility and Beneficial Reuse Site. Trail began his career in wastewater treatment with the City of Klamath Falls before coming to work for the City of Eugene in 2011. Trail brings seven years of well-rounded wastewater experience to his new position including three years of lead worker experience.

Power Shedding Exercises Earning Grant Money

The Wastewater Division worked with EWEB and BPA to perform 20 power shed exercises from June to December. For BPA and EWEB, power shedding for specific durations of one to four hours can have a significant impact on reducing their power demand costs. The hydro generated power on the grid is purchased at a lower cost than the fossil fuel powered generation. Power or load shedding during peak demand periods reduces the amount of fossil fuel power generation. BPA was looking for large power users who upon contact and within 10 minutes reduce their power load for short durations of one to three hours. If enough large power consumers can be pooled together to form an aggregate approach, BPA and EWEB could benefit from significant cost savings.

How does power shedding work at Wastewater? The first step was to evaluate the impacts of reducing the power levels used to treat the wastewater for short periods without affecting treatment. Most of this evaluation was already known from years of operating the facility in an energy conservation mode. The 10 minute response time shortened the list of power shedding opportunities to equipment that is controlled directly by the plant computer control and monitoring system. The computer allows the console operator to receive the call from BPA, call up a customized computer power shed graphic control screen, and initiate the equipment shut downs based on current conditions and guidance tables.

Continued on Page 6...

Engineering

Project Update: Washington/Jefferson Skatepark

Construction of the skatepark continues forging ahead under and around the I-105 Bridge. The Restroom construction continues with concrete masonry unit (CMU) installation complete and building enclosure getting started, underground electrical raceways and light footings are installed, and site concrete (excluding the urban plaza) is generally complete along with irrigation. In the skatepark area construction is approximately 50 percent complete, with the snake run, China bank area, right-hand kidney pool, and most of the 10 foot big bowl poured out and almost half of the street skate area is complete.

2G Construction is the general contractor and Dreamland Skateparks is the design/build skatepark contractor, both under separate contract to the City. The project challenges have included supplier delays, dry but unseasonably cold weather, and other anticipated unknowns but the project is on schedule to open in Spring 2014.

For Instagram users update photos and project 'stoke' are posted on a regular basis under the account @wj_skatepark. Additional information can be found on the City's website at http://www.eugene-or.gov/index.aspx?nid=1733

For questions contact **Adam Steffen** with Engineering or **Emily Proudfoot** with Parks & Open Space.

Transportation Options Coordinator Recognized as Rising Business Star

Lindsay Selser

Lindsay Selser was recognized as one of Eugene's " 20 Under 40 Rising Business Stars" by the Register Guard's Blue Chip magazine at an awards ceremony Tuesday evening. Lindsay was recognized for her role as the City's transportation options coordinator. She was instrumental in the creation and management of Eugene Sunday Streets and Smart Trips, two programs focused on increasing walking, biking, transit use and carpooling. Lindsay was also recognized for her community service as a volunteer at Womenspace, board secretary for Sexual Assault Support Services, and vice president of Southeast Neighbors.

When asked about what motivates her, Lindsay said, "My passion for my work is just really about service. Working for the public, you want to provide the best service possible. I do see walking and biking as the solution to many of our problems. Both of my parents were in public service. I don't really even know what any other model would look like. It was a natural fit for me."

Therese Walch – Her experience as a Loaned Executive to Community Campaign

Starting in about 1985, United Way of Lane County established a Loaned Executive (LE) Program to help out with their annual charitable fundraising campaign. The objective of the program is to help United Way maintain and enhance relationships with local employers to facilitate successful workplace campaigns. The ultimate goal is to help United Way (UW) and its partners create lasting change in the lives of people in our community. Loaned Executives are provided by private and public entities in Lane County. The City of Eugene has contributed an LE to UW since about 1995. For the 2013 campaign there were seven LEs total, from Pacific Source, Hawes Financial, Papé Group, Lane Transit District, Royal Caribbean, and the City of Eugene. Last year's City of Eugene LE was Therese Walch with Public Works Engineering. We decided to ask Therese a few questions about her experience….

What does it take to be successful as an LE?
United Way would say that LEs need to be effective communicators, with good verbal, written and persuasive presentation skills. They need to be self-directed and have the ability to prioritize and manage multiple projects. That said, they realize that LEs come from different backgrounds and therefore provide training in core areas: sales, organizational skills, public speaking, and creating a meaningful connection with the business and agency community. The common denominator for the "mighty seven" which we were referred to as was a positive attitude, enthusiasm, creativity, flexibility, ability to work as a team, and heart. We bonded in the first week.

The "Mighty Seven" 2013 Loaned Executives – Standing (l-r) Scott Morton, LTD; Heather Quaas, Hawes Financial; Penny Delgado-Hachee, Royal Caribbean; Tony Baker, Pacific Source; and Therese Walch, City of Eugene. Front (l-r) Lori Pfaff, Pacific Source and Rachel Edson, Papé

What is the job like?
The United Way office is abuzz with activity during campaign season. LEs are given a small desk, phone, and computer. Imagine adding seven new employees to your office all at once, showing them everything from where to store electronic files to how to use the helium tank to blow up balloons, and in the process empowering them to represent your agency! Once campaigns were in full gear, everyone chips in and juggles their schedules to accommodate what needs to be done. Personally, I learned to stretch myself and had plenty of opportunities to get outside of my comfort zone – whether it was asking people to donate money or telling my own personal stories and what motivates me to contribute.

What did you like the most about being an LE?
There were a lot of things I liked, but I'll boil it down to the people I met (United Way staff, the other LEs, employee campaign leaders, and representatives from social service agencies in Lane County doing the difficult and important work) and the feeling that we were doing something that would be of benefit to the entire community. I also felt great satisfaction from involving my young son in some of the activities like picking tomatoes at our Day of Caring project and making an "ugly lamp" for an in-office fundraiser.

What did you like the least?
Never feeling organized enough.

What was your most valuable lesson that you can apply back at your "day job?"
You don't always have to be organized to do a good job! Flexibility and being able to "shoot from the hip" are very good skills to have! I also learned that you can have fun while being incredibly productive and doing something meaningful.

Adopt-A-Family/Relief Nursery

In the spirit of the holidays, a number of PWE employees expressed interest in giving back to the community in some way. We are a large group, so we elected to take a large family. **Shelly Bronson**, PWE Senior Office Supervisor, made arrangements with the Relief Nursery to "adopt" a family of seven. The family had fallen on some hard times with dad being the primary provider and mom being pregnant and experiencing some medical problems. They also are caring for a young nephew.

The outpouring of support for the idea, and the sheer number of donations collected, was overwhelming. We were able to provide multiple items for each member of the family and many household items that the family desperately needed. Most items were practical, but some were just for the fun of it….especially for the kids. We collected nail polish, coloring books, music gift cards, and fun slippers to name just a few wonderful gifts donated by PWE employees.

A big thank you to everyone for helping make this family's holiday a little brighter!

Wastewater, continued...

How much power can we reduce? Several factors determine the amount of power reduction we can achieve. Time of day, flow into the plant, duration of the reduction request, and condition of the treatment processes are the major factors. On average, the treatment plant requires 1,400 kilowatts per hour (KWH) of power. For the one to two hour power shed requests, operations reduced power use by 500- 600 KW. For longer durations of up to 4 hours, the load reduction sustainability is less at 300-400 KW.

For our efforts, the Metropolitan Wastewater Management Commission will receive a $142,000 grant for participating in this BPA/EWEB project. The results and how they could be utilized in a fashion that will provide a cost savings benefit to all party's will be analyzed by BPA and EWEB in 2014.

Winter Wastewater Art

Aeration basins are filled with hundreds of air diffusers. Some of the diffusers leak a small amount of air. These are pictures taken from above the aeration basin showing where a diffuser, located under the water, ice, and snow has leaked and formed some interesting winter art.